

DEFENSE NUCLEAR FACILITIES SAFETY BOARD

November 8, 2002

TO: J. Kent Fortenberry, Technical Director
FROM: Tim Hunt, Oak Ridge Site Cognizant Engineer
SUBJ: Activity Report for Week Ending November 8, 2002

Staff member W. Andrews was on site this week providing Site Representative coverage. Staff members V. Anderson, F. Bamdad, J. Deplitch, W. Linzau, R. Zavadoski, and Outside Expert P. Rizzo were on site for a Highly Enriched Uranium Materials Facility (HEUMF) review.

A. BWXT Y-12 HEUMF Review: The staff reviewed the current status of the project. Issues continue to exist in areas such as geotechnical and structural considerations, hazards identification and analysis, controls identification, and the form and packaging of uranium for long-term storage. The staff intends to communicate the specific issues to the Department of Energy and BWXT Y-12 in the near future as well as follow up on the issues during subsequent technical reviews. (1-C)

B. BWXT Y-12 Building 9204-4: As previously reported (see October 18 and October 25, 2002 reports), there was a near-miss occurrence during a machining operation which involved the energetic ejection of a 150 pound steel object. A contractor team is currently investigating this incident and has developed a draft report. The staff was asked to wait for the final report until after a BWXT Y-12 senior management review. The staff agreed to this. It was shared with the staff that the most significant *Judgement of Need* identified was related to a potential requirement for a formal mechanism by which weapon system specific information regarding potential hazards would be transmitted from the design agency, in this case Lawrence Livermore National Laboratory (LLNL), to BWXT Y-12. This incident would most likely not have occurred if the existence of hazards which were known by LLNL had been effectively communicated to BWXT Y-12. This shortfall is very consistent with the shortfalls identified in the Board's recent Recommendation 2002-2, *Weapons Laboratory Support of the Defense Nuclear Complex*. (2-C)

C. BWXT Y-12 Enriched Uranium Operations (EUO) Criticality Occurrence: As a follow up to several conduct of operations and criticality safety violations that occurred recently in this area, the staff discussed with EUO personnel the ongoing corrective actions (see October 11, 2002 weekly) being taken. BWXT Y-12's final critique and comprehensive list of corrective actions has been published. From an EUO perspective, the corrective actions seem to be adequate. Unfortunately, there appears to be additional corrective actions which are necessary throughout Building 9212 and site-wide. Potential initiatives which, if implemented, might prevent or mitigate these types of occurrences include, (1) decreasing the inordinate number of different containers used for the handling and storage of uranium on site, and (2) aggressively pursuing disposition paths for uranium which is not needed for national security or is difficult or not currently possible to process at Y-12. The staff will continue to follow this issue closely. (2-A)